2.4 Biological Resources

Biological surveys of the site were conducted by URS, Vincent Scheidt, and others during various periods from 2001 through 2012. These surveys are included in the most recent study, "A Biological Resources Survey Report for the Shadow Run Ranch Project TM 5223RPL^3," dated December 2013, attached to this DEIR as Appendix C of the technical appendices to the DEIR. The report was authored by Vincent Scheidt, a biologist on the County's CEQA Consultant List.

2.4.1 Existing Conditions

The topography of the subject property slopes gently to steeply from approximately 770 feet above mean sea level (MSL) in the south to 1,620 feet MSL in the north. Existing dirt roadways on the subject property provide access to the agricultural areas, the reservoir in the northeast portion of the property, as well as existing trailers and single family homes. Soil types found onsite include Soboba stony loamy sand (SsE), Greenfield sandy loam (GrD), Cieneba-Fallbrook rocky sandy loam (CnE2), and Stony Land (SvE).

There are 11 generally discrete subcategories of plant communities found onsite. They are as follows: (1) Orchards and Vineyards, (2) Chamise Chaparral, (3) Diegan Coastal Sage Scrub, (4) Southern Sycamore-Alder Riparian Woodland, (5) Southern Coast Live Oak Riparian Forest, (6) Floodway, (7) Coast Live Oak Woodland, (8) Open Water, (9) Disturbed Habitat, (10) Urban/Developed, and (11) Field/Pasture. These areas are depicted on Figure 2-4-1, "Biological Resources," (also found in the back pocket of this DEIR). Table 2-4-1, "Habitat Impacts." summarizes the data for each of these habitats.

2.4.1.1 *Sensitive Habitats*

Nine of the habitat-types found onsite are categorized as sensitive habitat-types in the analysis.

Chamise Chaparral (0.5 acre)

Chamise Chaparral (CC) covers the extreme north end of the subject property. Indicators in this dense, brushy habitat include Chamise (*Adenostoma fasciculatum),* Mission Manzanita (*Xylococcus bicolor*), and other hard-woody shrubs. The onsite CC was formerly dense and relatively impenetrable, but was burned in the 2007 Poomacha Fire. The CC is currently growing back. The biological resource value of the CC is moderate to high, and qualifies as a sensitive habitat-type according to the County of San Diego Guidelines for Determining Significance pursuant to CEQA. The CC onsite also likely qualifies as Sensitive Habitat Lands (SHL) as defined by the County of San Diego Resources Protection Ordinance (RPO), insofar as it has the

potential to support the "the habitats of rare or endangered species or sub-species of animal or plants, as defined by Section 15380 of the State CEQA Guidelines.

Diegan Coastal Sage Scrub (50.0 acres onsite)

Diegan Coastal Sage Scrub (CSS) vegetation is located mostly on the northern and western portions of the site in association with south-facing slopes and the floodplain of Frey Creek. Several small patches of remnant or successional CSS associated with large rock outcrops are scattered throughout the agricultural area. Indicators in the CSS habitat include Flat-top Buckwheat *(Eriogonum fasciculatum)*, California Sagebrush *(Artemisia californica)*, California Brickellbush (*Brickellia californica*), Laurel Sumac (*Malosma laurina*), Our Lord's Candle (*Yucca whipplei*), and other soft-woody shrubs. The CSS in Frey Creek is interspersed with mature Coast Live Oaks (*Quercus agrifolia*), which are mapped as Coast Live Oak Woodland where the canopies of the trees are less than 100 feet apart. Small California Sycamores (*Platanus racemosa*) are also occasional in the CSS in Frey Creek. The CSS on the northernmost portion of the property was burned in the 2007 Poomacha Fire. This area is re-generating and is expected to fully recover. The biological resource value of the large-block areas of CSS is high, based on the presence of sensitive species and habitat connectivity. The small patches of CSS located within the groves are of limited biological resource value. CSS is a sensitive habitat-type in San Diego County, according to the *County of San Diego Guidelines for Determining Significance* pursuant to CEQA. The CSS onsite also likely qualifies as SHL as defined by the RPO, insofar as it has the potential to support the "the habitats of rare or endangered species or sub-species of animal or plants, as defined by Section 15380 of the State CEQA Guidelines.

Southern Sycamore-Alder Riparian Woodland (2.5 acres)

The headwaters of Frey Creek, located on the northeastern-most portion of the property, support a substantial Southern Sycamore-Alder Riparian Woodland (SSARW). This habitat-type was burned in the 2007 Poomacha wildfire, but is re-generating vigorously. The canopy of the SSARW is currently open, although it is anticipated that it is closing as it recovers from the fire. Some areas are likely to remain open, particularly at the western boundary of the SSARW where it converts to Southern Coast Live Oak Riparian Forest. Indicators in the SSRAW include White Alder (*Alnus rhombifolia*), Red Willow (*Salix laevigata*), and Black Cottonwood (*Populus trichocarpa*), re-sprouting California Sycamores and Coast Live Oaks, and herbaceous wetland species, such as Desert Grape (*Vitis girdiana*), California Blackberry (*Rubus ursinus*), and Poison Oak (*Toxicodendron diversilobum*). This habitat-type continues offsite to the northeast. The biological resource value of this wetland habitat-type is very high, based on its scarcity in the County of San Diego and its connectivity to other wetland habitat-types along Frey Creek. SSARW is a

sensitive habitat-type in San Diego County, according to the *County of San Diego Guidelines for Determining Significance* pursuant to CEQA. The SSARW onsite also likely qualifies as SHL as defined by the RPO, insofar as it has the potential to support the "the habitats of rare or endangered species or sub-species of animal or plants, as defined by Section 15380 of the State CEQA Guidelines.

Southern Coast Live Oak Riparian Forest (3.3 acres)

The floodplain of Frey Creek immediately to the west of the SSARW supports Southern Coast Live Oak Riparian Forest (SCLORF). This habitat-type also burned in the Poomacha Fire and is currently re-generating. Due in part to the fire, the canopy of the onsite SCLORF is very open. It is expected that more cover will be provided as the Coast Live Oaks and California Sycamores that form the overstory of this habitat-type regenerate, although it is unlikely that this area will ever support a completely closed canopy. Understory species in the SCLORF include scattered Mule Fat (*Baccharis glutinosa*), Douglas Sagewort (*Artemisia douglasiana*), and CSS species. The onsite SCLORF exhibits habitat connectivity with additional SCLORF offsite to the west and SSARW to the east. The biological resource value of this wetland habitat-type is high. SCLORF is a sensitive habitat-type in San Diego County, according to the *County of San Diego Guidelines for Determining Significance* pursuant to CEQA. The SCLORF onsite also likely qualifies as SHL as defined by the RPO, insofar as it has the potential to support the "the habitats of rare or endangered species or sub-species of animal or plants, as defined by Section 15380 of the State CEQA Guidelines.

Floodway (2.1 acres)

The floodway (i.e., incised channel) of Frey Creek supports Floodway habitat. This habitat-type consists mainly of bare sand, gravel, and small to very large boulders. Riparian species, such as Mule Fat, Arroyo Willow (*S. lasiolepis*), and Western Cottonwood (*Populus fremontii*), and upland scrub species are occasional in the Floodway. This habitat-type continues offsite to the southwest in the floodway of Frey Creek. Floodway is of high biological resource value, and is categorized as a sensitive habitat-type in San Diego County, according to the *County of San Diego Guidelines for Determining Significance* pursuant to CEQA. The Floodway onsite also likely qualifies as SHL as defined by the RPO, insofar as it has the potential to support the "the habitats of rare or endangered species or sub-species of animal or plants, as defined by Section 15380 of the State CEQA Guidelines.

Coast Live Oak Woodland (23.8 acres onsite, 0.7 acres offsite)

Both Dense and Open Coast Live Oak Woodland (CLOW) are found onsite in areas where mature Coast Live Oak trees are dominant or co-dominant. Because these two habitat-types are difficult to distinguish one from the other, they are both mapped

simply as CLOW for the purposes of the current analysis. CLOW occurs onsite within the floodplain of Frey Creek, on a north-facing slope on the northern portion of the property, and in several patches scattered throughout the groves. The understory of the CLOW within Frey Creek, on the northern portion of the property, and to the south of the reservoir consists mostly of CSS shrubs, Poison Oak, and other native species. The understory of the patches of CLOW located within the groves consists of citrus trees, weeds, and developed areas. Isolated Coast Live Oaks are also found scattered throughout the groves, but these trees are not mapped as part of the CLOW because they do not function as part of this habitat-type. CLOW occurs within the southerly offsite road alignment, along segments of Adams Drive, and offsite to the west, east, and south. The biological resource value of the CLOW onsite is moderate to high, depending on patch size, habitat connectivity, and understory species composition. CLOW is a sensitive habitat-type in San Diego County, according to the *County of San Diego Guidelines for Determining Significance* pursuant to CEQA. The CLOW onsite also likely qualifies as SHL as defined by the RPO, insofar as it has the potential to support the "the habitats of rare or endangered species or sub-species of animal or plants, as defined by Section 15380 of the State CEQA Guidelines.

Open Water (2.7 acres)

The site's water storage reservoir supports Open Water (OW). This feature is man-made and stores groundwater that has been pumped from onsite wells, as a source of irrigation water for the groves. The reservoir is lined and treated with chemicals for vector control. The water level fluctuates regularly as the water is pumped into the reservoir to replenish it, and is then used through a gravity system to irrigate the groves. Additionally, water sprayers are regularly used to disturb the surface of the water in the reservoir for mosquito abatement. The combination of these activities minimizes the presence of vectors in the reservoir. The reservoir is not located in any watercourse. A single small stand of Cattails (*Typha latifolia*) is located at the edge of the reservoir and is mapped as part of the OW. The reservoir also supports aquatic macrophytes (submersed aquatic plants) in shallow areas as well as introduced game fish. The biological resource value of this habitat-type is low to moderate, due to its man-made origin and the required ongoing maintenance. Nevertheless, OW is a sensitive habitat-type in San Diego County, according to the *County of San Diego Guidelines for Determining Significance* pursuant to CEQA. The OW onsite likely does not qualify as SHL as defined by the RPO.

Field/Pasture 0.5 acre onsite

The southern edge of the property extends to the southern edge of SR 76. This area contains a narrow strip of Field/Pasture (F/P) onsite. The F/P continues offsite to the south, where it is grazed by hoof stock and supports mostly irrigated turf with weeds

growing along its fringes. The biological resource value of this habitat-type is moderate, as it does provide open area for raptor foraging. F/P is considered sensitive in San Diego County, according to the *County of San Diego Guidelines for Determining Significance* pursuant to CEQA. The F/P onsite likely does not qualify as SHL as defined by the RPO because it does not appear to support rare or endangered species, and is not part of any wildlife corridor as defined by Section 15380 of the State CEQA Guidelines.

2.4.1.2 *Sensitive Plant and Animal Species*

The property was surveyed for sensitive plants and animals. Sensitive plants and animals are those considered sensitive by the County of San Diego, or any State or Federal agency. Of the 185 species of vascular plants observed, none are sensitive. Of the 90 species of animals were observed, 13 species are considered sensitive. Sensitive species identified on the project site include: Cooper's Hawk, White-tailed Kite, Turkey Vulture, Yellow Warbler, Southern California Rufous-crowned Sparrow, Red-shouldered Hawk, Great Blue Heron, Mountain Lion, Bobcat, Mule Deer, San Diego Desert Woodrat, Coastal Western Whiptail, and Orange-throated Whiptail.

Other sensitive animals known to inhabit the general vicinity of the property are listed in Table 7 of the Biological Resources Survey Report, Appendix C to this DEIR.

2.4.1.3 *Wetlands/Jurisdictional Waters*

The project site supports regionally-significant wetlands. Areas of the site that fall within the floodway of Frey Creek qualify as supporting federal (ACOE-defined), state (CDFW-defined), and County (RPO) wetlands, as well as 'waters of the State' and 'waters of the United States.' Other federal and state jurisdictional areas onsite include the SCLORF and an unvegetated upland swale that drains the center of the site. Figure 2.4-2, "Jurisdictional Water and Wetlands" depicts the jurisdictional areas on the project site.

A second unvegetated upland swale is present within the proposed project on the project's eastern boundary. All of these areas likely qualify as state wetlands and state and federal 'waters,' but not federal or county wetlands. Although the Open Water of the reservoir supports wetland habitat, it does not qualify as jurisdictional wetlands or 'waters' due to the fact that it is a man-made, lined, agricultural feature that requires constant maintenance. The current definitions utilized by these agencies with respect to wetlands regulation are provided in the project biological resources survey report (EIR Appendix C).

2.4.1.4 *Threatened or Endangered Species*

Several directed field surveys and habitat evaluations were conducted in conjunction with the biological assessment for the project.

Directed Field Survey: California Gnatcatcher

The California Gnatcatcher is a federally-listed 'threatened' songbird, and has been found on habitat similar to that found on the project site. Gnatcatchers occur in coastal and interior areas of coastal sage and related scrub habitats typically dominated by California Sagebrush (*Artemisia californica)*, Flat-top Buckwheat *(Eriogonum fasciculatum)*, Laurel Sumac *(Malosma laurina)*, and other soft-woody shrubs.

Protocol gnatcatcher presence/absence field surveys were conducted in 2001, 2005, and 2009, but none were detected on the property. The project site is considered 'unoccupied' by this federally-listed Threatened Species.

Directed Field Survey: Arroyo Toad

Arroyo Toad (*Bufo microscaphus californicus*), is a federally listed 'Endangered' amphibian. This species is a small (two to three inches), variably-colored anuran with warty skin and small dark spots.

Frey Creek, which runs along the western edge of the property, supports areas that could qualify as potential Arroyo Toad breeding habitat. The nearest known breeding areas for Arroyo Toad are approximately 3.8 miles to the south, between the subject property and the Pauma Valley Country Club, and approximately 3 miles to the northwest. It is also highly likely that Arroyo Toads reproduce in the nearby areas of San Luis Rey River (SLRR) floodway, which is located a short distance to the south of the project site, across SR76. Arroyo Toads are known to move at least 1 km in all directions from breeding areas during dispersal. Even if not breeding in Frey Creek, specimens could easily move up this ephemeral drainage from its confluence with the San Luis Rey River during post-reproductive dispersal, where toads are expected to occur.

A series of six Arroyo Toad presence/absence field surveys, pursuant to the current United States Fish and Wildlife Service (USFWS) protocol, was completed for the project site during April, May, and June of 2007. An updated survey was completed in April, May and June 2012. No Arroyo Toads were detected during any of the nocturnal surveys, and the subject site is considered 'unoccupied' by this federally-listed Endangered Species, based on the results of the 2007 and 2012 field surveys.

Arroyo Toad could utilize parts of the subject property for aestivation and as a post-reproductive dispersal corridor. However, this would be restricted to Frey Creek and the adjoining natural areas to the north and west. The agricultural areas of the site are

unsuitable for aestivation and post-reproductive dispersal due to past management as a grove, including the use of herbicides, pesticides, changes in the soil chemistry, compaction and other activities associated with past grove maintenance.

Habitat Evaluation: Least Bell's Vireo

Least Bell's Vireo *(Vireo bellii pusillus*), a state-listed and federally-listed Endangered migratory songbird, occurs in dense willow-dominated riparian habitats similar to that found in patches along portions of Frey Creek. Least Bell's Vireo is also known to nest in nearby upland areas, such as Black Mustard (*Brassica nigra)* thickets (D. Mayer, CDFW, personal communication). The nearest known reproducing populations of this rare species are approximately 3 miles to the northwest of the project site, in the San Luis Rey River (SLRR), which passes a short distance to the south of the property (although specimens are not reported in proximity to the site). In order to avoid the need for focused field surveys for this species, all of the riparian habitats on this site are considered potentially 'occupied' by Least Bell's Vireo and other riparian nesting species during the breeding season. However, it should be noted that no Least Bell's Vireos have been observed on the property during any of the biological field surveys, which have taken place over the course of many years.

Habitat Evaluation: Southwestern Willow Flycatcher

Southwestern Willow Flycatcher (*Empidonax trailii extimus*) is a federally-listed Endangered migratory songbird that nests in mature riparian vegetation that is most typically located over running or standing water, with a specific type of understory structure. Portions of the habitat at the northern end of Frey Creek are marginally suitable for this species. The nearest known populations of this very rare species are approximately three miles to the northwest of the project site in the SLRR, (although specimens are not reported in proximity to the site). In order to avoid the need for focused field surveys for this species, all of the riparian habitats on this site are considered potentially 'occupied' by Southwestern Willow Flycatcher and other riparian nesting species during the breeding season. However, it should be noted that no Southwestern Willow Flycatchers have been observed on the property during any of the biological field surveys, which have taken place over the course of many years

Habitat Evaluation: Quino Checkerspot Butterfly

Quino Checkerspot Butterfly (*Euphydryas editha quino*) is a federally-listed Endangered butterfly known to occur in portions of San Diego, western Riverside County, and adjacent Baja California, Mexico. This distinctive, colorful, medium-sized butterfly is apparently restricted to open habitats supporting at least one of several larval food-plants. The best understood Quino indicator is Dot-seed Plantain *(Plantago erecta),* a very common annual forb associated with numerous open

habitats. Our understanding of this species suggests that Quino is dependent on very specific features associated with P.E. In their absence, it is unlikely that Quino would be a resident species.

The project site supports certain features that might constitute Quino indicators, including 'hilltopping' sites, openings in the brush, plants in the Scrophulariaceae family (including Dot-seed Plantain), etc. However, there are no recent records for Quino occurring in the Pauma Valley. Based in these factors, the probability for Quino to occur on this site is considered moderate. If present, specimens would generally be found in areas proposed for open space conservation. The probability for occurrence in the development area of the site is considered very low.

Directed Field Survey: Jurisdictional Wetland Delineation

A formal Jurisdictional Wetland Delineation, pursuant to the Unified Federal Method (1987), was conducted for the project site by URS in August and September of 2001. In addition, a directed Resource Protection Ordinance (RPO) wetland survey, pursuant to the County's revised (2007) RPO definitions, was completed by Vincent Scheidt and Julia Groebner in July and August of 2009. Portions of the site qualify as county, state, and federal jurisdictional wetlands. Although the RPO wetland survey did not include a formal delineation, each of the drainage areas identified in the URS delineation were examined during the survey and their jurisdictional statuses were updated based on current site conditions. The results of the RPO wetland survey have been incorporated into Section 1.4.7 as well as Figure 7 of the Biological Resources Survey Report (EIR Appendix C).

2.4.1.5 *Habitat Connectivity and Wildlife Corridors*

The project site provides both locally-important and regionally-important wildlife corridors. Local corridors facilitate wildlife movement from nesting or sheltering area to nearby sources of food, water, or similar daily necessities. Regional corridors provide movement areas between large habitat blocks, facilitating animal migration on a larger scale. Frey Creek functions as both a local and regional wildlife corridor, connecting SLRR with the natural slopes on the south flanks of Palomar Mountain. This corridor extends along the western side of the property, beginning offsite to the north in forest service lands, and ending at the SLRR, where up-river/down-river dispersal and movement occurs. Many species of wildlife are dependent on the ecological function provided by the project site. Numerous large animals occur on the project site, including Mountain Lion, Mule Deer, Bobcat, Coyote, and Gray Fox. All of these species use the wildlife corridor provided by Frey Creek. Rodent and lagomorphs, scores of riparian and other birds, reptiles and amphibians are also known to use resources found on the project site.

2.4.2 Analysis of Project Effects and Determination as to Significance

2.4.2.1 *Methodology*

A County-approved biologist reviewed the existing literature, including: U.S. Department of Agriculture (USDA) Soil Conservation Service (SCS) mapping for the project area; a database query of potential on-site sensitive species based on a determination of the site's physical characteristics (*e.g.*, location, elevation, soils/substrate, and topography); documentation of California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDB) records for the project vicinity; and previous biology reports prepared for the project area.

Field surveys of the TM 5223RPL^3 property were completed in April of 2005, April through June of 2007, July and August of 2009, and April through July of 2012. The specific dates, personnel, and weather conditions are presented in Table 1 of the Biological Resources Survey Report (EIR Appendix C).

A previous biology study and wetland delineation of the subject property was completed by URS in 2001. The raw data from that report *(Biological Resources and Wetland Delineation Report; Schoepe Ranch Property; Pala, California; TM 5223)* have been incorporated into the current biological resources survey report in Appendix C, with the exception of obvious errors, such as Yellow Willow (*Salix lutea*), a plant that does not occur in San Diego County but was included on the species list of the URS biology report.

All plants, animals, and habitats encountered during survey periods were noted in the field. The limits of each habitat-type were mapped in the field utilizing an aerial photograph of the property. All plants and animals identified in association with the property are listed in Tables 4 and 5 of Appendix C. Plants were identified *in situ*, or based on characteristic floral parts collected and later examined in detail. Binoculars were used to aid in observations and all wildlife species detected were noted. Several directed field surveys and habitat evaluations were conducted in conjunction with the biological survey of the property. Each survey complied with approved protocols to maximize detection of the respective biological resources, if present.

All potential project-related effects were evaluated using the guidelines for significance.

Guidelines for significance were determined using appropriate provisions of the San Diego County General Plan, CEQA, and other relevant federal and state ordinances, policies, and regulations. In addition, County of San Diego staff provided further consultation in the formulation of guidelines.

2.4.2.2 *Guidelines for the Determination of Significance – Special Status Species*

According to the *County of San Diego Guidelines for Determining Significance and Report Format and Content Requirements for Biological Resources* (September 2010), the project would have a significant impact to sensitive status species if it would:

- Have a substantial adverse effect, either directly or through habitat modifications, on a candidate, sensitive, or special status species listed in local or regional plans, policies, or regulations, or by the CDFW or USFWS.

2.4.2.3 *Analysis – Special Status Species*

The project development envelope totals 105.1 acres, including 10.1 acres that are "impact neutral" and 7.6 acres that will be impacted for road improvements. The project also includes 39.1-acre of agricultural open space easement, 7.9-acres of recreational open space easement, and 91.3 acres of biological open space easement.

The analysis of this threshold is guided by ten criteria, as noted below.

Criterion 1: The project would impact one or more individuals of a species listed as federally or state endangered or threatened.

The site is considered potentially occupied by Least Bell's Vireo, a state and federally-listed Endangered Species, and Southwestern Willow Flycatcher, which is listed as federally endangered. Least Bell's Vireo and Southwestern Willow Flycatcher are not expected to occur in any of the areas proposed for development, but they could potentially be indirectly impacted by the noise associated with construction in the absence of seasonal restrictions on noise–generating activities. Criterion 1 is exceeded and mitigation is required for anticipated impacts. (**Impact BI-1**)

Criterion 2: The project would impact the regional long-term survival of a County Group A or B plant species, or a County Group I animal species, or a species listed as a state Species of Special Concern.

Although the project will impact Cooper's Hawk, Southern California Rufous-crowned Sparrow, Red-shouldered Hawk, Turkey Vulture, and White-tailed Kite, all of which are County Group I animal species, those impacts will not affect the regional long-term survival of any of these species. This is because, although sensitive, all of these species are relatively widely distributed in San Diego County, occurring, in some cases, over hundreds of thousands of acres. Furthermore, habitat supporting these species, including the most biologically sensitive areas of the site, will be preserved in dedicated biological open space, thereby ensuring the long-term

survival of these species on the project site. Criterion 2 is not exceeded, less than significant impacts are anticipated, and no mitigation is necessary.

Criterion 3: The project would impact the regional long-term survival of a County Group C or D plant species or a County Group II animal species.

Although the project will impact Great Blue Heron, Yellow Warbler, Mountain Lion, San Diego Desert Woodrat, Mule Deer, Bobcat, Orange-throated Whiptail, and Coastal Western Whiptail, all of which are County Group II animal species, those impacts will not affect the regional long-term survival of any of these species. This is because, although sensitive, all of these species are relatively widely distributed in San Diego County, occurring, in some cases, over hundreds of thousands of acres. Furthermore, habitat supporting these species, including the most biologically sensitive areas of the site, will be preserved in dedicated biological open space, thereby ensuring the long-term survival of these species on the project site. Criterion 3 is not exceeded, impacts are less than significant, and no mitigation is necessary.

Criterion 4: The project may impact Arroyo Toad aestivation or breeding habitat.

Arroyo Toad does not occur on this site, based on the results of a protocol survey in 2007 and 2012. However, aestivation could take place on the project site. The only areas of the site where this would take place are associated with Frey Creek and the adjoining lands to the north and west. These areas are proposed for open space. The agricultural areas on the project site do not support any suitable Arroyo Toad aestivation habitat due to ongoing grove maintenance activities. Criterion 4 is not exceeded, less than significant impacts are anticipated, and no mitigation is necessary.

Criterion 5: The project would impact Golden Eagle habitat.

Although the project could impact Golden Eagles foraging habitat, the most suitable foraging habitat, which coincides with the most biologically sensitive areas of the site, will be preserved in dedicated biological open space, thereby ensuring the long-term use of this site by this species. Criterion 5 is not exceeded, less than significant impacts are anticipated, and no mitigation is required.

Criterion 6: The project would result in a loss of functional foraging habitat for raptors.

The entire project site provides foraging habitat for raptors, although the most high-value areas in terms of raptor foraging are composed of the scrub and woodlands, depending on the raptor species. Raptor species onsite include Cooper's Hawk, Red-shouldered Hawk, Red-tailed Hawk and others. Therefore, the project will result in the loss of approximately 101.5 acres of potential raptor foraging habitat. This loss is not sufficient to result in regionally-significant, adverse impacts. This is because all of the raptor species found onsite are wide-ranging and are not anticipated to be dependent on resources provided solely by the TM 5223RPL^3 project site.

Furthermore, approximately 91.3 acres of the highest quality raptor foraging habitat will be preserved onsite in biological open space, thereby ensuring the continuing viability of much of the raptor foraging habitat onsite. Additional, raptors will also be able to continue to forage in the 39-acre agricultural and 8-acre recreation open space lots. Therefore, Criterion 6 is not exceeded, less than significant impacts are anticipated, and no mitigation is necessary.

Criterion 7: The project would increase noise and/or nighttime lighting to a level above ambient proven to adversely affect sensitive species.

The project could increase noise and/or nighttime lighting. However, it is not expected that this increase would be to levels that could affect sensitive species. The project includes a 200-foot biological buffer of Frey Creek along most of its length to ensure that noise and/or nighttime lighting from the proposed development will not increase to levels that could affect the behavior of the site's resident wildlife. Additionally, lighting associated with the future development will be low lumen and directed downward. The draft Resource Management Plan (RMP) requires that no lighting be installed within the biological open space and that any lighting associated with the development area shall be directed downward and away from the preserve. Furthermore, the proposed residential development project will comply with the County of San Diego Light Pollution Code, also known as the Dark Sky Ordinance. With regard to noise, potential noise impacts associated with construction activities on nesting birds would be mitigated through limitations on construction timing. Operational noise impacts would be less than significant due to adequate buffering. Therefore, Criterion *7* is not exceeded and impacts are less than significant. No mitigation is required.

Criterion 8: The project would impact the viability of a core wildlife area, defined as a large block of habitat (typically 500 acres or more not limited to project boundaries, though smaller areas with particularly valuable resources may also be considered a core wildlife area) that supports a viable population of a sensitive wildlife species or an area that supports multiple wildlife species.

The project site does not constitute a core wildlife area, because it is not within a 500 acre or larger block of native habitat. Criterion 8 is not exceeded, less than significant impacts are anticipated, and no mitigation is necessary.

Criterion 9: The project would increase human access or predation or competition from domestic animals, pests or exotic species to levels that would adversely affect sensitive species.

The project could increase human access or predation or competition from domestic animals, pests or exotic species to levels that would adversely affect sensitive species. Increased human use of the site could result in access, predation and/or competition

impacts to special status species. Criterion 9 is exceeded, and mitigation for anticipated impacts will be required. (**Impact BI-2**)

Criterion 10: The project would impact nesting success of sensitive animals through grading, clearing, modification, and/or noise generating activities such as construction.

The project could impact nesting success of sensitive animals through grading, clearing, modification, and/or noise generating activities such as construction. Criterion 10 is exceeded, and mitigation for anticipated impacts is necessary. (**Impact BI-3**)

In summary, the project will result in some significant indirect impacts (Criteria 1, 9, and 10) to special status species as described above. Edge effects, which include human presence and competition introduced by domestic pets, are also anticipated. These impacts will require mitigation. The remainder of the guidelines are not impacted.

2.4.2.4 *Guidelines for the Determination of Significance – Riparian Habitat or Sensitive Natural Community*

According to the *County of San Diego Guidelines for Determining Significance and Report Format and Content Requirements for Biological Resources* (September 2010), the project would have a significant impact to riparian habitat or sensitive natural communities if it would:

- Have a substantial adverse effect on riparian habitat or another sensitive natural community identified in local or regional plan, policies, regulations or by the CDFW or USFWS.

2.4.2.5 *Analysis – Riparian Habitat or Sensitive Natural Community*

TM 5223RPL^3 is anticipated to cause significant direct impacts and indirect long-term impacts to riparian habitats or other sensitive natural communities under the stated guidelines. This threshold is analyzed with the guidance of the following five criteria.

Criterion 1: Project-related construction, grading, clearing, construction or other activities will temporarily or permanently remove sensitive native or naturalized habitat on or off the project site.

Project-related future construction, grading, clearing, or other activities will permanently remove sensitive native or naturalized habitat on the project site, including direct impacts to 0.5 acre of field/pasture (F/P), 1.2 acres of CSS and 3.0 acres of CLOW. Unauthorized clearing resulting in an additional loss of 2.3 acres of CSS and 0.14 of CLOW will also be considered an impact, but will be mitigated at a higher ratio.

These vegetation-types are relatively well distributed in San Diego County, although CSS and CLOW habitats have decreased historically due to historical development. Therefore, Criterion 1 is exceeded, and mitigation for anticipated significant impacts is required. (**Impact BI-4)**

Criterion 2: Any of the following will occur to or within jurisdictional wetlands and/or riparian habitats as defined by ACOE, CDFW and the County of San Diego: removal of vegetation; grading; obstruction or diversion of water flow; adverse change in velocity, siltation, volume of flow, or runoff rate; placement of fill; placement of structures; construction of a road crossing; placement of culverts or other underground piping; any disturbance of the substratum; and/or any activity that may cause an adverse change in native species composition, diversity and abundance.

Project-related future construction, grading, clearing, or other activities will result in impacts to jurisdictional wetlands as defined by ACOE and CDFW.

Although most of the site's jurisdictional wetlands and all of the site's riparian habitats will be protected in a biological open space easement, certain relatively minor impacts to two unvegetated upland swales located within the project footprint are unavoidable. These impacts will consist of the construction of three drainage crossings associated with the required road improvements. One of the drainage crossings will be located near the center of the project site; and two crossings are located at the southern end of the site Impacts to jurisdictional wetlands associated with the crossings may include grading; temporary obstruction or diversion of water flow; the placement of fill; and the placement of culverts or other underground piping. These improvements will impact approximately 0.015 acre (258 lineal feet) of state wetland and state and federal "waters". The project will not impact County (RPO) wetlands, as these are avoided by project design. Criterion 2 is exceeded, impacts are significant, and mitigation for anticipated impacts is required. (**Impact BI-5**)

Criterion 3: The project would draw down the groundwater table to the detriment of groundwater-dependent habitat, typically a drop of 3 feet or more from historical low groundwater levels.

The project will results in a net reduction of 28 percent in the amount of non-potable groundwater used on the project site. This is because some groundwater-irrigated citrus trees will be retired and the related groundwater usage (from wells) will be eliminated. Therefore, impacts to groundwater-dependent habitats are anticipated to be below any currently experienced as a result of the use of existing wells. Any project-related use of groundwater will be monitored pursuant to approved county, state, and/or federal protocols. Potable water will be provided by the YMWD from off-site wells. When projected potable water use and project's agricultural water use are combined, total use is approximately 10 percent below current demand.

Therefore, Criterion 3 is not exceeded, impacts are less than significant, and no mitigation is required.

Criterion 4: The project could increase human access or competition from domestic animals, pests or exotic species to levels proven to adversely affect sensitive habitats.

The project could increase human access or competition from domestic animals, pests, or exotic species to levels proven to adversely affect sensitive habitats. Increased human use of the site could result in access, predation and/or competition impacts to sensitive habitats. Criterion 4 is exceeded, impacts are significant, and mitigation for anticipated impacts is required. (**Impact BI-6**)

Criterion 5: The project does not include a wetland buffer adequate to protect the functions and values of existing wetlands.

The project includes wetland buffers that are adequate to protect the functions and values of existing wetlands. The project design incorporates wetland buffers that extend at least 50 feet from the outer edge of all RPO wetlands, with protection from future fire clearing through the dedication of 100-foot Limited Building Zones (LBZs). Additionally, as required by the RPO, the project provides up to a 200-foot wetland buffer in areas where CLOW adjoins the RPO wetlands over most of the length of Frey Creek. The project will provide a 100 foot native vegetation buffer, a 100 foot agricultural (citrus) buffer, and a 100 foot LBZ along the entire length of Frey Creek (RPO Wetland) with the exception of a pinch point on Lots 33-35 where the buffer would narrow to only 100 feet of native vegetation and a 100-foot LBZ . Agriculture would not continue in the first 100 feet, and the trees in that area will be removed. Existing agriculture could continue in the second 100 feet, but only as long as it remains in continuous operation; the applicants couldn't expand the groves beyond their current extent, and once agricultural use has ceased, it can't be re-established in that buffer area. As a result adequate buffers are maintained. Therefore, Criterion 5 is not exceeded and impacts are less than significant. No mitigation is required.

In summary, the project has direct significant impacts to 0.5 acre of F/P 1.2 acres of CSS and 3.0 acres of CLOW. Unauthorized clearing resulting in an additional loss of 2.3 acres of CSS and 0.14 of CLOW will also be considered an impact to be mitigated at a higher ratio. Although most of the site's jurisdictional wetlands and riparian habitats will be protected in biological open space; certain relatively minor impacts to these features are unavoidable. These are restricted to impacts associated with required road and drainage improvements. The project will not impact County (RPO) wetlands, as these are avoided by design.

2.4.2.6 *Guidelines for the Determination of Significance – Jurisdictional Wetlands and Waterways*

According to the *County of San Diego Guidelines for Determining Significance and Report Format and Content Requirements for Biological Resources* (September 2010), the project would have a significant impact to jurisdictional wetlands and waterways if it would:

- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filing, hydrologic interruption or other means.

2.4.2.7 *Analysis– Federal Jurisdictional Wetlands and Waterways*

This threshold is analyzed with the guidance of the following three criteria.

Criterion1: Project-related construction, grading, clearing, construction or other activities would temporarily or permanently remove federally protected wetlands on or off the project site.

Project-related construction, grading, clearing, construction or other activities will not temporarily or permanently remove federally protected wetlands on or off the project site. Criterion 1 is not exceeded, impacts are not significant, and no mitigation is required.

Criterion2: Any of the following will occur to or within jurisdictional wetlands and/or riparian habitats as defined by ACOE, CDFW and the County of San Diego: removal of vegetation; grading; obstruction or diversion of water flow; adverse change in velocity, siltation, volume of flow, or runoff rate; placement of fill; placement of structures; construction of road crossings; placement of culverts or other underground piping; any disturbance of the substratum; and/or any activity that may cause an adverse change in native species composition, diversity and abundance.

Project-related future construction, grading, clearing, or other activities will result in impacts to federal jurisdictional wetlands as defined by ACOE and CDFW. Although most of the site's jurisdictional wetlands and all of the site's riparian habitats will be protected in biological open space, certain relatively minor impacts to two unvegetated upland swales located within the project footprint are unavoidable. These impacts will consist of the construction of three drainage crossings associated with the required road improvements. One of the drainage crossings will be located near the center of the project site; and two crossings are located at the southern end of the site. Impacts to federal jurisdictional wetlands associated with the crossings may include grading; temporary obstruction or diversion of water flow; the placement of fill; and the placement of culverts or other underground piping. These improvements will impact approximately 0.02 acre (344 lineal feet) of state wetland and state and federal "waters". The project will not impact County (RPO) wetlands, as these are avoided by design. Criterion 2 is exceeded, impacts are significant, and mitigation for anticipated impacts is required. (**Impact BI-5**)

Criterion 3: The project would draw down the groundwater table to the detriment of groundwater-dependent habitat, typically a drop of three feet or more from historical low groundwater levels.

The project will results in a 28 percent net reduction in the amount of groundwater used for irrigation on the project site. Potable water for 44 residences will be provided by offsite wells under the control of the YMWD. When this use is included, overall water use is reduced by 10 percent This is because groundwater-irrigated citrus trees will be retired and the related groundwater usage (from wells) will be eliminated. Therefore, impacts to groundwater-dependent habitats are not anticipated beyond any currently experienced as a use of existing wells. Any project-related use of groundwater will be monitored pursuant to approved County, state, and/or federal protocols. Potable water will be provided from imported sources. Criterion 3 is not exceeded, impacts are less than significant, and no mitigation is required.

Criterion 4: The project would increase human access or competition from domestic animals, pests, or exotic species to levels proven to adversely affect federally protected wetlands. The project will not increase human access or competition from domestic animals, pests, or exotic species to levels proven to adversely affect federally-protected wetlands. Criterion 4 is not exceeded, impacts are not significant, and no mitigation is required.

Criterion 5: The project does not include a wetland buffer adequate to protect the functions and values of existing wetlands.

The project includes wetland buffers that are adequate to protect the functions and values of existing wetlands. The proposed buffers extend at least 50 feet from the outer edge of all RPO wetlands, with protection from future fire clearing through the dedication of 100-foot LBZs. Furthermore, as required by the RPO, the project provides a 200-foot wetland buffer in areas where CLOW adjoins the RPO wetlands over most of the length of Frey Creek. Therefore, Criterion 5 is not exceeded, impacts are less than significant, and no mitigation is required.

2.4.2.8 *Guidelines for the Determination of Significance – Wildlife Movement and Nursery Sites*

According to the *County of San Diego Guidelines for Determining Significance and Report Format and Content Requirements for Biological Resources* (September 2010), the project would have a significant impact to wildlife movement and nursery sites if it would:

- Interfere substantially with the movement of the native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.

2.4.2.9 *Analysis – Wildlife Movement and Nursery Sites*

This guideline is analyzed with the guidance of the following six criteria.

Criterion 1: The project would prevent wildlife access to foraging habitat, breeding habitat, water sources, or other areas necessary for their reproduction.

The project could prevent wildlife access to foraging habitat, breeding habitat, water sources, or other areas necessary for their reproduction. However, most areas onsite that are used by wildlife will be protected in a biological open space easement. Wildlife use of the water storage reservoir is very limited, due to its very small size and the fact that it is chemically-treated. Certain native birds and mammals probably used this feature for foraging or as a water source. However, the proposed project will not impact wildlife use of the reservoir, as that area will be included in a Recreational Open Space Easement and will not be directly impacted by development. No change in its use or function is anticipated. This easement adjoins the biological open space easement to the north and east and an Agricultural Open Space Easement to the south, thereby buffering the reservoir from possible edge effects associated with development of the project site. Any potential impacts to wildlife access to foraging habitat, breeding habitat, water sources, or reproduction areas are expected to be negligible and therefore, less than significant. Therefore, Criterion 1 is not exceeded and impacts are less than significant. No mitigation is proposed.

Criterion 2: The project would substantially interfere with connectivity between blocks of habitat, or would potentially block or substantially interfere with a local or regional wildlife corridor or linkage.

The project will not substantially interfere with connectivity between blocks of habitat, nor would it potentially block or substantially interfere with a local or regional wildlife corridor or linkage. The project preserves the local and regional wildlife corridor provided by Frey Creek within a biological open space easement. Criterion 2 is not exceeded, impacts are less than significant, and no mitigation is necessary.

Criterion 3: The project would create artificial wildlife corridors that do not follow natural movement patterns.

The project will not create artificial wildlife corridors that do not follow natural movement patterns for wildlife. The biological open space easement is designed to preserve existing blocks of habitat and avoid narrowed corridors. Criterion 3 is not exceeded and impacts are less than significant. No mitigation is proposed.

Criterion 4: The project would increase noise and/or nighttime lighting in a wildlife corridor or linkage to levels proven to affect the behavior of the animals identified in a site specific analysis of wildlife movement.

The project could increase noise and/or nighttime lighting in a wildlife corridor, linkage, or nursery. However, it is not expected that this increase would be to levels that could affect the behavior of the site's resident wildlife. A site specific analysis of wildlife movement was not conducted; however, the extensive field surveys of the property included observations regarding wildlife movement. These surveys identified Frey Creek as a local and regional wildlife corridor and nursery site. Frey Creek will be completely avoided by design, and the project includes a 200-foot biological buffer of Frey Creek along most of its length to ensure that noise and/or nighttime lighting from the proposed development will not increase to levels that could affect the behavior of the site's resident wildlife. Additionally, lighting associated with the future development will be low lumen and directed downward. The draft RMP requires that no lighting be installed within the preserve area and that any lighting associated with the development area shall be directed downward and away from the preserve. Further, the proposed residential development project will comply with the County of San Diego Light Pollution Code, also known as the Dark Sky Ordinance. Therefore, Criterion 4 is not exceeded and impacts are less than significant. No mitigation will be required.

Criterion 5: The project does not maintain an adequate width for an existing wildlife corridor or linkage and/or would further constrain an already narrow corridor through activities such as (but not limited to) reduction of corridor width, removal of available vegetative cover, placement of incompatible uses adjacent to it, and placement of barriers in the movement path.

The proposed project places 91.3 acres into biological open space, all of which is linked and fully supports wildlife movement. The project will not further constrain an already narrow corridor, no removal of vegetative cover (other than exotics removal pursuant to an approved RMP) will take place within the open space, no incompatible uses will be placed adjacent to the open space, and no barriers to the movement path will be created. Criterion 5 is not exceeded, and impacts are less than significant. No mitigation is necessary.

Criterion 6: The project does not maintain adequate visual continuity (i.e., long lines-of-sight) within wildlife corridors or linkage.

The project's 91.3 acres of biological open space provide adequate visual continuity within wildlife corridors and/or linkages because it follows natural drainage courses and no obstruction will be placed in the corridor. Criterion 6 is not exceeded, impacts are less than significant, and no mitigation is required.

2.4.2.10 *Guidelines for the Determination of Significance – Local Policies, Ordinances, Adopted Plans*

According to the *County of San Diego Guidelines for Determining Significance and Report Format and Content Requirements for Biological Resources* (September

2010), the project would have a significant impact to local policies, ordinances, and adopted plans if it would:

- Conflict with one or more local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance, and/or would conflict with the provisions of an adopted Habitat Conservation Plan (HCP), Natural Community Conservation Plan (NCCP), or other approved local, regional, or state habitat conservation plans.

2.4.2.11 *Analysis – Local Policies, Ordinances, Adopted Plans*

This threshold is analyzed with the guidance of the following 12 criteria.

Criterion 1: For lands outside of the Multiple Species Conservation Program (MSCP), the project would impact coastal sage scrub (SCC) vegetation in excess of the County's 5% habitat loss threshold as defined by the Southern California Coastal Sage Scrub Natural Community Conservation Planning Process (NCCP) Guidelines.

The project site is located outside of the MSCP, but it supports far less than 5 percent of the CSS habitat loss threshold as defined by Southern California Coastal Sage Scrub NCCP Guidelines. Onsite impacts to CSS include project-related impacts of 1.2 acres of CSS, with additional historical unauthorized clearing of 2.3 acres that will also be addressed by the project, totaling 3.5 acres requiring mitigation. Impacts to 3.5 acres of CSS will be mitigated pursuant to the issuance of Habitat Loss Permit, and subject to the Southern California Coastal Sage Scrub NCCP Conservation Guidelines (See Impact BI-4 above and Impact BI-7 below). Criterion 1 is not exceeded, impacts are less than significant, and no mitigation is required.

Criterion 2: The project would preclude or prevent the preparation of the subregional NCCP. For example, the project proposes development within areas that have been identified by the County or resource agencies as critical to future habitat preserves.

The project will not preclude or prevent the preparation of the subregional NCCP. Although the subject site is identified as a Pre-approved Mitigation Area and major wildlife linkage in the County's draft North County MSCP, the majority of the development portion of the site is in active agriculture, disturbed, and/or fragmented. Furthermore, the project preserves all areas of the site that function as viable wildlife linkages in biological open space. Therefore, the project does not propose development within any areas that are critical to future habitat preserves. Criterion 2 is not exceeded, impacts are less than significant, and no mitigation is necessary.

Criterion 3: The project will impact any amount of sensitive habitat lands as outlined in the Resource Protection Ordinance (RPO).

The project will impact a measurable amount of habitats that could be identified as SHL as defined by the RPO. The project will directly impact 1.2 acres of CSS and 3.0 acres of CLOW. Unauthorized clearing that resulted in an additional loss of 2.3 acres of CSS and 0.14 of CLOW is also be considered a project impact. These impacts qualify as SHL impacts. Mitigation will be required. (**Impact BI-7**)

Criterion 4: The project would not minimize and/or mitigate coastal sage scrub habitat loss in accordance with Section 4.3 of the Natural Communities Conservation Planning Process (NCCP) Guidelines.

The project minimizes and mitigates all impacts to CSS habitat in accordance with Section 4.3 of the NCCP Guidelines. The project accomplishes this by preserving a large block of CSS along the northern and western boundaries of the site and by minimizing development of the large block of CSS along the eastern property boundary. The project design maximizes the use of areas that are already developed, disturbed, and/or fragmented. Furthermore, the project will fully mitigate all impacts to CSS habitat. Criterion 4 is not exceeded, impacts are less than significant, and no mitigation is necessary.

Criterion 5: The project does not conform to the goals and requirements as outlined in any applicable Habitat Conservation Plan (HCP), Habitat Management Plan (HMP), Special Area Management Plan (SAMP), Watershed Plan, or similar regional planning effort.

The project is not located in an area subject to the goals and requirements as outlined in any existing Habitat Conservation Plan (HCP), Habitat Management Plan (HMP), Special Area Management Plan (SAMP), Watershed Plan, or similar regional planning effort. Criterion 5 is not exceeded, impacts are less than significant, and no mitigation is necessary.

Criterion 6: For lands within the Multiple Species Conservation Program (MSCP), the project would minimize impacts to Biological Resource Core Areas (BRCAs), as defined in the Biological Mitigation Ordinance (BMO).

The project is not located within any implemented MSCP Subarea Planning Area. Therefore, the project is not subject to the designation of Biological Resource Core Areas (BRCAs), as defined in the Biological Mitigation Ordinance (BMO). Criterion 6 is not exceeded, impacts are less than significant, and no mitigation is required.

Criterion 7: The project would preclude connectivity between areas of high habitat values, as defined by the Southern California Coastal Sage Scrub Natural Communities Conservation Planning Process (NCCP) Guidelines.

The project will not preclude connectivity between areas of high habitat values, as defined by the NCCP Guidelines because it preserves large blocks of habitat in

protected open space. Criterion 7 is not exceeded, impacts are less than significant, and no mitigation is required.

Criterion 8: The project does not maintain existing movement corridors and/or habitat linkages as defined by the Biological Mitigation Ordinance (BMO).

The project is not subject to the Biological Mitigation Ordinance (BMO). Criterion 8 is not exceeded, impacts are less than significant, and no mitigation is necessary.

Criterion 9: The project does not avoid impacts to MSCP narrow endemic species and would impact core populations of narrow endemics.

The project is not subject to the narrow endemic species provisions of the BMO. Furthermore, the project will not impact any core populations of narrow endemic species. Criterion 9 is not exceeded, impacts are less than significant, and no mitigation is required.

Criterion 10: The project would reduce the likelihood of survival and recovery of listed species in the wild.

The project could result in potential indirect impacts to the state and federally-listed Least Bell's Vireo and the federally-listed Southwestern Willow Flycatcher. This represents a potentially significant impact. Therefore, Criterion 10 is exceeded, impacts are potentially significant, and mitigation is required. (**Impact BI-1**)

Criterion 11: The project would result in the killing of migratory birds or destruction of active migratory bird nests and/or eggs (Migratory Bird Treaty Act).

The project could result in the killing of migratory birds or destruction of active migratory bird nests and/or eggs (Migratory Bird Treaty Act) due to grading on or near nesting habitats. Impacts will be significant, and mitigation is required. (**Impact BI-8**)

Criterion 12: The project would result in the take of eagles, eagle eggs or any part of an eagle (Bald and Golden Eagle Protection Act).

The project site does not support Golden Eagles or eagle eggs Criterion 12 is not exceeded, impacts are less than significant, and no mitigation is necessary.

2.4.3 Cumulative Impact Analysis

A study area approximately 65 square miles around the project was selected to encompass the primary population centers in the region, as well as the principal biological features in the area, in order to capture the maximum number of potential cumulative projects. These biological features include Agua Tibia Wilderness, Pala Mountain, and the SLRR. The study area is shown on Figure 2-4-4, "Cumulative Projects for Biology."

According to the *County of San Diego Guidelines for Determining Significance and Report Format and Content Requirements for Biological Resources* (September 2010), the project would have a significant cumulative impact to biological resources if it would:

- Have impacts that are individually limited, but cumulatively considerable.

The analysis of cumulative impacts is addressed for special status species, riparian/sensitive natural community, jurisdictional wetlands and waterways, wildlife movement/nursery sites, or local policies/ordinances/adopted plans.

2.4.3.1 *Special Status Species*

Although Special Status Species will be directly and indirectly impacted by the project, mitigation reducing impacts to a level of no significance will ensure that the project will not contribute to any significant cumulative impacts when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects affecting the same resource. This is because all of the Special Status Species onsite are relatively widely distributed in San Diego County, and no critical populations of these species would be supported by the TM 5223RPL^3 project site or sites of other proposed projects affecting some of these same species. Other proposed projects affecting some of the same Special Status Species found on the project site include TM 5338, TM 5499, TM 5540, TM 5263, TPM 21004, and MUP 05-014. All of these projects have either minimal impacts or have incorporated mitigation to reduce the impact to below a level of significance (e.g., no construction during nesting season, preservation of habitat in open space easements). Thus, cumulative impacts related to special status species are determined to be less than significant.

2.4.3.2 *Riparian Habitat or Sensitive Natural Community*

The Proposed Project will contribute to the cumulative loss of riparian habitat or other sensitive natural communities. Project-related future construction, grading, clearing, or other activities will permanently remove sensitive native or naturalized habitat on the project site. That is, the project will directly impact 0.5 acres of F/P, 1.2 acres of CSS and 3.0 acres of CLOW. Unauthorized clearing resulting in an additional loss of 2.3 acres of CSS and 0.14 of CLOW will also be considered an impact, but will be mitigated at a higher ratio. These vegetation-types are relatively well distributed in San Diego County, although both CSS and CLOW are sensitive and have been greatly reduced from their historical ranges. Therefore, the relatively minor impacts to these vegetation-types (from a regional perspective), although adverse and significant, are not 'cumulatively considerable' when viewed in connection with the substantial acreages of scrub, pasture, and oak woodland vegetation remaining in the San Diego County region. Also, due to the extent of these

habitats onsite and the fact that all impacts to riparian habitats and sensitive natural communities will be mitigated to a level that is below significance, approval of the project will not have cumulatively considerable impacts when viewed in connection with the effects of past projects, the effects of other current project, and the effects of probable future projects affecting the same resources. Other proposed projects affecting some of the same riparian habitats or other sensitive natural communities found on the project site include TM 5338, VTM 5254, TM 5263 (wetlands), TM 5354, TM 5499, TM 5508, TM 5540 (wetlands and coast live oak), TPM 21004, and MUP 05-014 (wetlands). All of these projects have either minimal impacts, or have incorporated mitigation to reduce the impact to below a level of significance (e.g., preservation of habitat in open space easements, use of an RPO buffer, and implementation of a revegetation plan). Thus, cumulative impacts related to riparian habitats and sensitive natural communities are determined to be less than significant.

2.4.3.3 *Jurisdictional Wetlands and Waterways*

The Proposed Project will result in an impact to Jurisdictional Wetlands and Waterways. Required road and drainage improvements associated with the project will result in impacts to approximately 0.015 acre (258 lineal feet) of state wetland and state and federal "waters." However, due to the extent of these habitats onsite, the disturbed nature of the jurisdictional wetlands and waters being impacted, and the fact that all impacts to Wetlands and Waterways will be mitigated to a level that is below significance, approval of the project will not have a cumulatively considerable impact when viewed in connection with the effects of cumulative projects affecting the same resource.

Other proposed projects affecting some or similar Wetlands and Waterways as are found on the TM 5223RPL^3 project site include TM 5338, TM 5499, TM 5540, TM 5263, TPM 21004, and MUP 05-014. All of these projects have either minimal impacts or have significant impacts and will incorporate mitigation to reduce the impact to below a level of significance to result in no net loss of wetlands. Such mitigation includes preservation of habitat in open space easements, use of an RPO buffer, and implementation of a revegetation plan. Thus, cumulative impacts related to jurisdictional wetlands and waterways are determined to be less than significant.

2.4.3.4 *Wildlife Movement and Nursery Sites*

The Proposed Project results in less than significant impacts to wildlife movement and nursery sites, since the project will preserve they Frey Creek corridor on the site within a Biological Open Space Easement. Further, mitigation measures have been incorporated into the project to ensure that nesting birds are protected during project construction. Of the 23 cumulative projects considered in this analysis, none were identified as having impacts to wildlife movement or nursery sites. Thus, no

cumulative impact related to wildlife movement or nursery sties is identified. Impacts would be less than significant. No mitigation is necessary.

2.4.3.5 *Local Policies, Ordinances and Adopted Plans*

Project level impacts related to RPO and MBTA were identified for the project; however, these impacts were reduced to below a level of significance. Other proposed projects affected by some of the same Local Policies, Ordinances, or Adopted Plans include TM 5338, TM 5354, VTM 5424, TM 5499, TM 5508, TM 5540, TM 5263, TPM 21004, and MUP 05-014. All of these projects have incorporated mitigation to reduce the impact to below a level of significance (e.g., no construction during nesting season, preservation of habitat in open space easements). Thus, cumulative impacts related due to consistency with local policies, ordinances and adopted plans are determined to be less than significant.

2.4.4 Significance of Impacts Prior to Mitigation

A brief summary of all direct and indirect impacts which were determined to be significant by the analysis provided by the biological resources survey report (Appendix C) is included below. Table 2-4-1, "Habitat Impacts and Mitigation Analysis," details project impacts.

2.4.4.1 *Impacts to Special Status Species*

BI-1 The site is considered potentially occupied by Least Bell's Vireo, a state and federally-listed Endangered Species, and Southwestern Willow Flycatcher, which is listed as federally endangered. Least Bell's Vireo and Southwestern Willow Flycatcher are not expected in any of the areas proposed for development, but they could potentially be indirectly impacted by the noise associated with construction in the absence of seasonal restrictions on noise-generating activities.

BI-2 The project could increase human access or predation or competition from domestic animals, pests or exotic species to levels that would adversely affect sensitive species.

BI-3 The project could impact nesting success of sensitive animals through grading, clearing, modification, and/or noise generating activities such as construction.

2.4.4.2 *Impacts to Riparian Habitat or Sensitive Natural Communities*

BI-4 Project-related construction, grading, clearing, or other activities will permanently remove sensitive native or naturalized habitat on the project site. That is, the project will directly impact 0.5 acre of F/P, 1.2 acres of

CSS and 4.1 acres of CLOW. Unauthorized clearing that resulted in an additional loss of 2.3 acres of CSS and 0.14 of CLOW is also considered a project impact.

BI-5 Project-related future construction, grading, clearing, or other activities will result in impacts to Riparian Habitat and jurisdictional wetlands as defined by ACOE and CDFW. These impacts will consist of the construction of four drainage crossings associated with the required road improvements. These improvements will impact approximately 0.02 acre (344 lineal feet) of state wetland and state and federal "waters".

BI-6 The project could increase human access or competition from domestic animals, pests, or exotic species to levels proven to adversely affect sensitive habitats. Increased human use of the site could result in access, predation and/or competition impacts to sensitive habitats.

2.4.4.3 *Impacts to Federal Jurisdictional Wetland and Waterways*

BI-5 Project-related future construction, grading, clearing, or other activities will result in impacts to federal jurisdictional wetlands as defined by ACOE and CDFW. These impacts will consist of the construction of four drainage crossings associated with the required road improvements. These improvements will impact approximately 0.015 acre (258 lineal feet) of state wetland and state and federal "waters".

2.4.4.4 *Impacts to Local Policies, Ordinances, Adopted Plans*

BI-7 The project will impact habitats that are identified as SHL as defined by the RPO. The project will directly impact 1.2 acres of CSS and 3.0 acres of CLOW. Unauthorized clearing that resulted in an additional loss of 2.3 acres of CSS and 0.14 of CLOW is also considered a project impact.

BI-1 The project could result in potential indirect impacts to the state and federally-listed Least Bell's Vireo and the federally-listed Southwestern Willow Flycatcher.

BI-8 The project could result in the killing of migratory birds or destruction of active migratory bird nests and/or eggs (Migratory Bird Treaty Act) due to grading on or near nesting habitats.

2.4.5 Mitigation

2.4.5.1 *M-BI-1 LBV and SWF Nesting/Breeding Season Mitigation*

(Impacts BI-1 and BI-3) Because the project site is considered potentially occupied by Least Bell's Vireo and Southwestern Willow Flycatcher, grading or construction

noise in excess of 60 decibels shall not be permitted during the breeding season of these species (mid-March to mid-September), in order to avoid impacts to potentially nesting vireos, flycatchers, and/or other riparian obligate songbirds. This restriction may be waived if directed surveys for these two species are conducted on all areas within 300 feet of the proposed activity. The results of these surveys should be provided in a report to the Director of Planning & Development Services for concurrence with the conclusions and recommendations. The biologist shall coordinate with the on-site acoustician in determining noise levels on the site, unless it is determined by directed surveys that the birds are not present.

2.4.5.2 *M-BI-2 Increased Access Mitigation*

(Impacts BI-2, BI-4, BI-6 and BI-7) In order to protect sensitive habitats and species, a 91.3-acre biological open space easement shall be granted over the areas shown on Figure 2-4-3, "Open Space and Fencing Plan," and on TM 5223RPL^3. The onsite biological open space easement shall preclude the removal of vegetation or placement of accessory structures. A RMP shall be implemented and approved by the Director of Planning & Development Services for the biological open space easement.

The RMP shall:

- Contain provisions to ensure long-term viability of the onsite habitat and the site's resident sensitive species;
- Specify remediation as necessary, in perpetuity, to maintain habitat viability within the onsite Biological Open Space Easement.
- Include provisions to erect permanent fencing, vehicular and human access barriers, and other measures to minimize edge effects. The onsite biological open space easement is intended to preclude the removal or addition of structures and vegetation. The management of the biological open space easement shall conform to the guidelines set out in the approved RMP. In order to prevent fire clearing impacts to the biological open space easement, suitable LBZs are required. These easements shall extend outward towards development from the biological open space easement boundaries and shall prohibit the construction of houses, barns, or other habitable structures that would require fire clearing into the biological open space easement.
- Signage shall be included along the open space easement with the following language:

  Sensitive Environmental Resources Area Restricted by Easement

  Entry without express written permission from the County of San Diego is prohibited. To report a violation or for more information about easement

restrictions and exceptions contact the County of San Diego Planning & Development Services Reference: (TM 5223)

2.4.5.3 *M-BI-3 Clearing, etc., Impacts to Bird Nesting/Breeding Areas Mitigation*

(Impacts BI-3 and BI-8) Clearing, grading, grubbing or tree removal shall be prohibited between January 15 and August 31 to avoid potential impact to nesting species covered under the MBTA. In lieu of avoidance, a preconstruction survey prior to clearing, grubbing or tree removal can be conducted to confirm the presence or absence of nesting birds. The survey results shall be provided to the County of San Diego, Planning & Development Services for review and approval of any proposed activity during the breeding season. Any habitat supporting nests shall be avoided, along with a suitable buffer, until a subsequent survey reveals all young have fledged.

2.4.5.4 *M-BI-4 State Wetlands, Federal 'Waters' Impact Mitigation*

(Impact BI-5) The County requires mitigation for impacts to "non-wetland waters of the U.S" at a 1-to-1 ratio. According the *County of San Diego Guidelines for Determining Significance and Report Format and Content Requirements – Biological Resources* (September 2010), mitigation for impacts to non-wetland waters may include onsite or offsite improvements or enhancement of water resources. The project proposes that mitigation for impacts to non-wetland water of the U.S. take place onsite, via restoration and enhancement of wetland functions and values associated with Frey Creek. Wetland mitigation activities will require the preparation and implementation of an approved Wetland Mitigation Plan.

Because the project will impact state wetlands and state and federal 'waters,' it will likely be necessary to obtain certain Regulatory Agency permits. To that end, it is recommended that the applicant provide to the Director of Planning & Development Services proof of notification of the ACOE and the California Regional Water Quality Control Board (CRWQCB) regarding Clean Water Act Section 404/401 Permits, or evidence that such notification is not required. Also recommended prior to recordation of the Final Map shall be proof provided to the Director that the applicant has obtained a 1600-series Streambed Alteration Agreement with the CDFW, or proof that such an agreement is not required. The details of any additional mitigation for impacts to jurisdictional wetlands and waterways will be established through the permitting process required to obtain 404-401 and 1600-series documents from the regulatory agencies.

2.4.5.5 *M-BI-5*

(Impacts BI-4 and BI-7) Impacts to 0.5 acre of F/P shall be mitigated at a 0.5-to-1 ratio. The F/P mitigation shall be preserved offsite in a County-approved location, unless out of kind mitigation is accepted for impacts to this habitat type, in which

case the mitigation can be achieved within the proposed biological open space easement on the project site. The onsite F/P provides value only insofar as it provides some limited potential raptor foraging habitat, and therefore habitats that provide similar functions and values as the F/P would be suitable for such mitigation. For example, CSS or NNG will provide similar open-land raptor foraging habitat and could therefore be considered for mitigation to F/P. Offsite mitigation will take place at the Daley Ranch Conservation Bank, the Red Mountain Conservation Bank, or other County-approved location.

Impacts to 1.2 acre of CSS shall be mitigated at a 2-to-1 ratio. The unauthorized clearing of 2.3 acres of CSS shall be mitigated at a 3-to-1 ratio. Thus total mitigation requirement for CSS is 9.3 acres. The onsite biological open space easement includes 25 acres of CSS that are available for use as mitigation for project impacts. The project will therefore be able to accomplish all mitigation for impacts to CSS onsite as these acreages are in excess of the County's minimal requirements.

Impacts to 3.0 acre of CLOW shall be mitigated at a 3-to-1 ratio. The unauthorized clearing of 0.14 acres of CLOW shall be mitigated at a 4-to-1 ratio. Thus total mitigation requirement for CLOW is 9.6 acres. The onsite biological open space easement includes 7.5 acres of CLOW that are available for use as mitigation for project impacts. An additional 2.1 acres of CLOW shall be secured off site in a County-approved location.

2.4.6 Conclusion

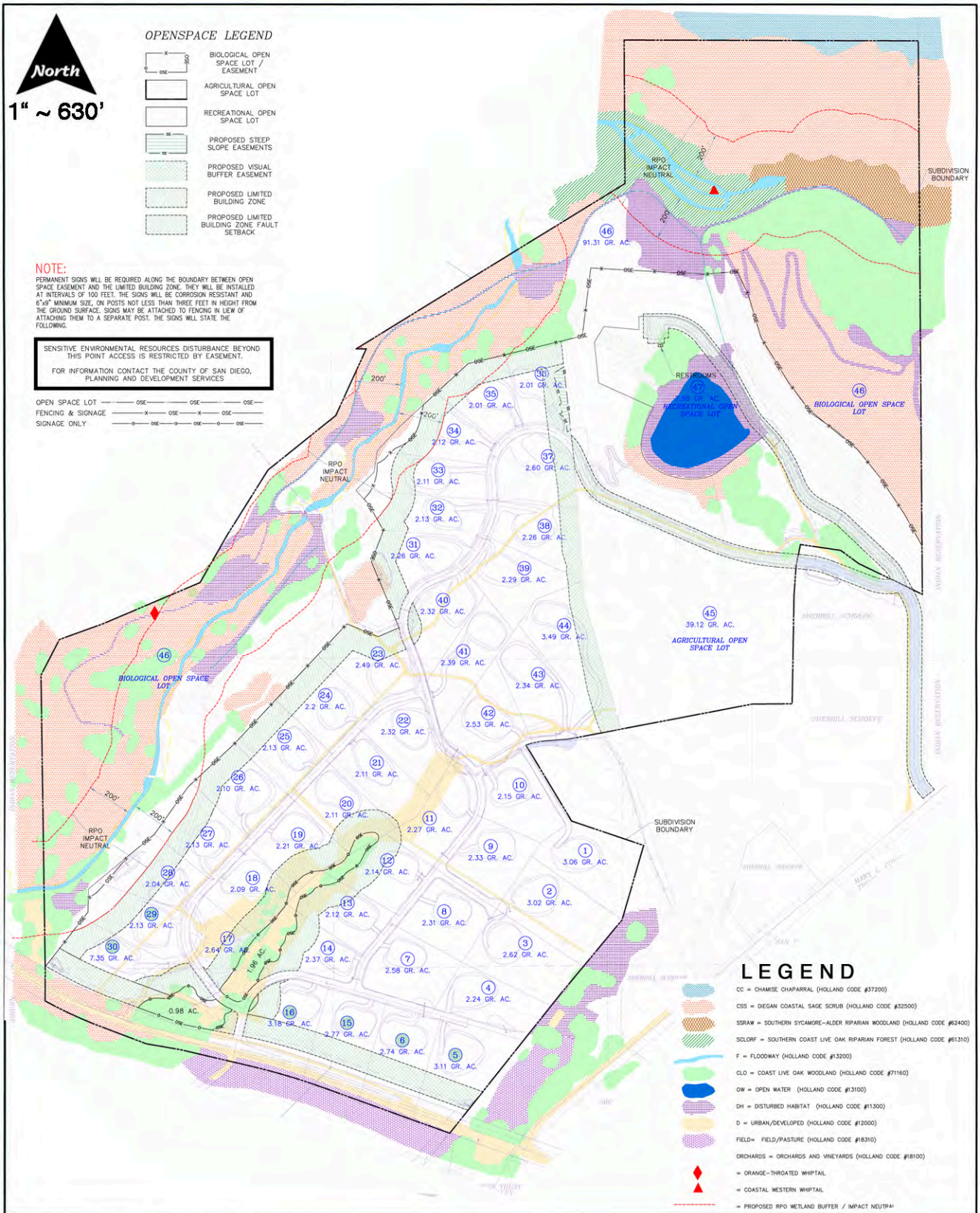
Biological resources were analyzed by a County-approved biological consultant. The analysis included review of prior records and reports, field visits, and review of current mapping. Future development of the project site, as presently proposed, could result in significant direct and indirect impacts to species of special status, riparian habitat or sensitive natural communities, jurisdictional wetlands and waterways, and local policies, ordinances, and adopted plans.

The project design proposes a 91.3-acre biological open space preserve to protect sensitive species, riparian and jurisdictional wetlands and wildlife corridors. Mitigation is required to strengthen open space protections, and will require implementation of an RMP that will provide for long-term management of the open space.

Direct impacts to sensitive habitats and jurisdictional wetlands and waterways will be mitigated by a program of on- and off-site preservation. Mitigation is provided according to established mitigation ratios, ranging from 0.5-to-1 to 4-to-1 for each acre of project impact. Through a program of avoidance and open space protection, controls on grading and construction activity, and habitat mitigation, the project mitigates its significant impacts to below a level of significance. This mitigation will be effective because it will

preserve sensitive biological resources in a biological open space easement and will protect them in perpetuity.

The possibility for cumulative impacts within a 65-mile area surrounding the project site was investigated. The analysis concluded that cumulative impacts would be less than significant.



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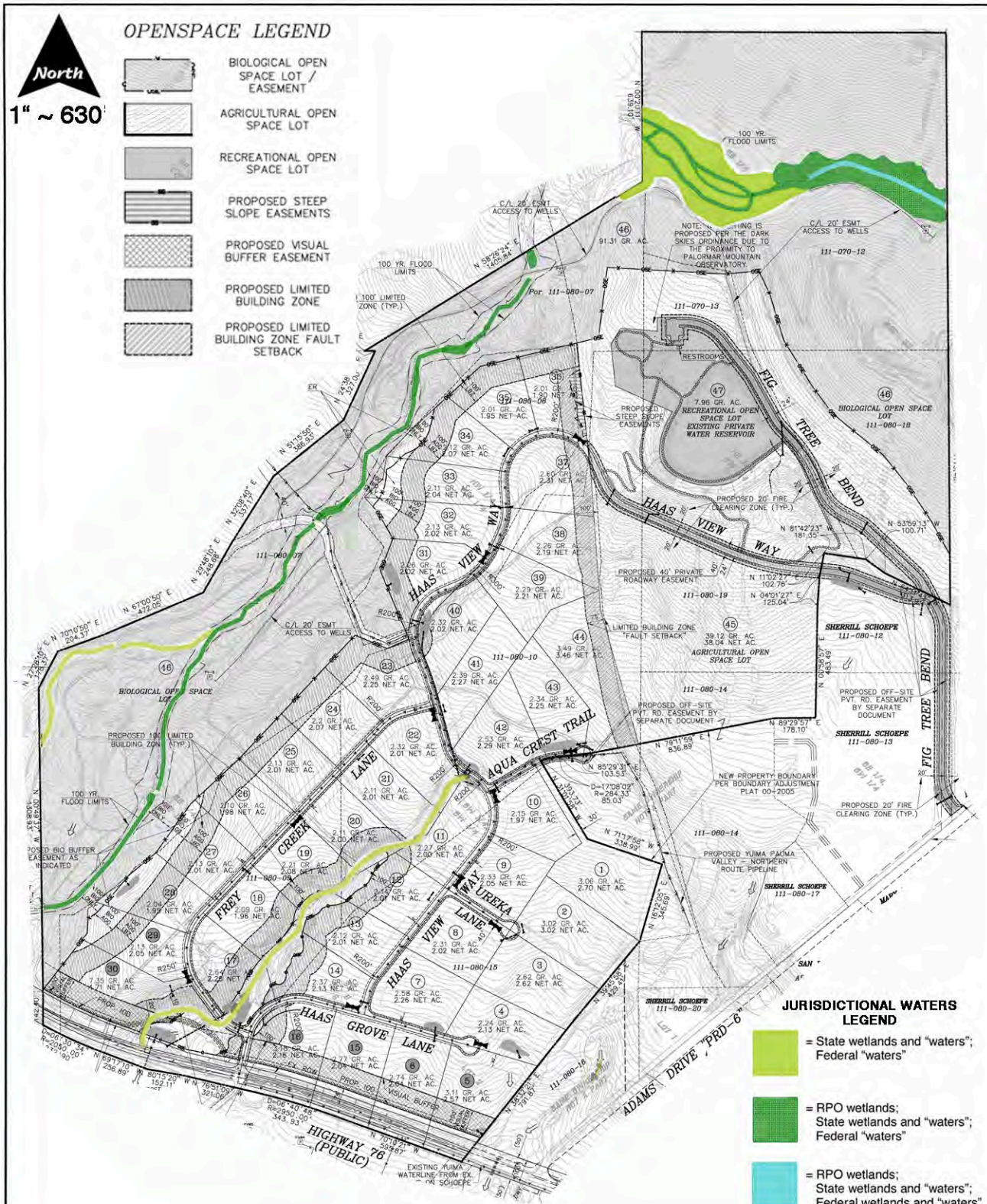
Biological Resources

Figure 2-4-1



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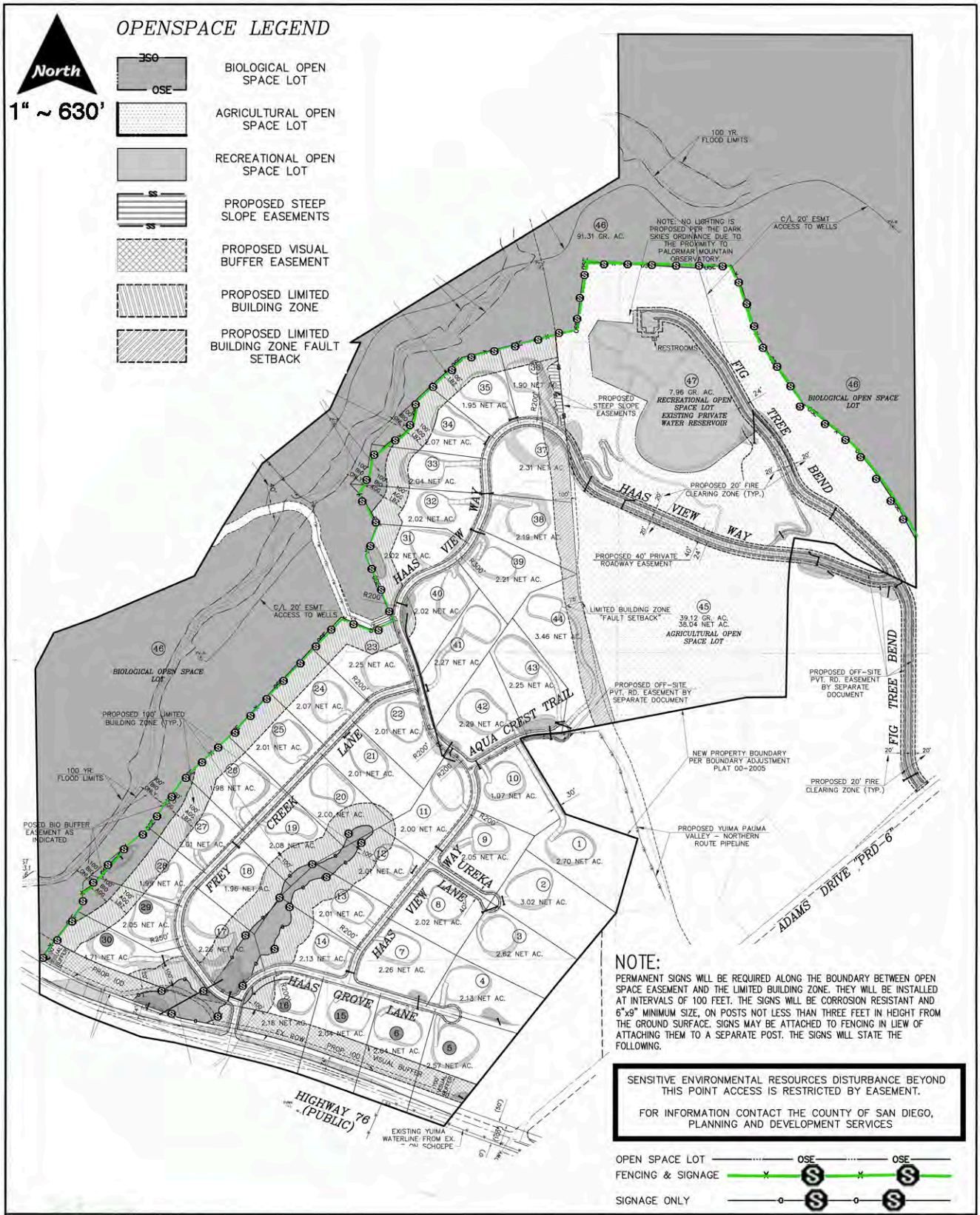
Jurisdictional Wetlands and "Waters"

Figure 2-4-2



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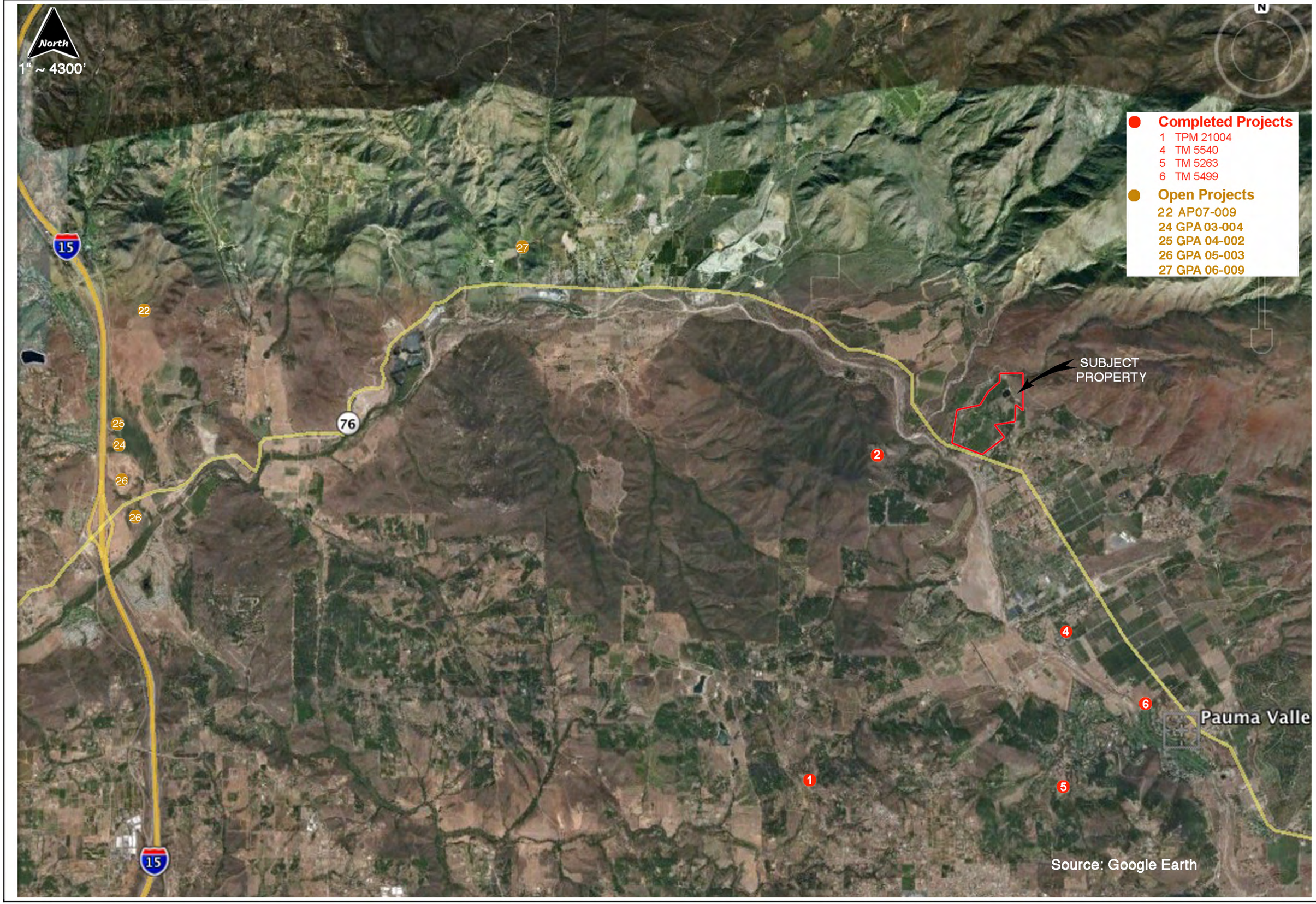
Open Space, Fencing and Signage Plan

Figure 2-4-3



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Cumulative Projects for Biology

Figure 2-4-4

Habitat	Existing Acres	Impact Acres	Mitigation Ratio	Mitigation Required	Preserved Onsite	Impact Neutral	Mitigation Provided
Orchards and Vineyards[1]	142.9	96.6	n/a	none	6.4	5.5	n/a
Chamise Chaparral	0.5	none	n/a	none	0.5	none	avoidance
Diegan Coastal Sage Scrub[2]	50.0	3.5	2:1/3:1	9.3	25.0	20.2	9.3 onsite
Southern Sycamore-Alder Riparian Woodland	2.46	none	n/a	none	none	2.46	avoidance
Southern Coast Live Oak Riparian Forest	3.32	none	n/a	none	trace	3.29	avoidance
Floodway	2.05	none	n/a	none	none	2.05	avoidance
Coast Live Oak Woodland[3]	23.8	3.1	3:1/4:1	9.6	7.5	9.6	7.5 onsite 2.1 offsite
Open Water	2.67	none	n/a	none	none	none	n/a
Disturbed Habitat	11.0	none	none	none	2.7	6.1	n/a
Urban/Developed	9.8	9.3	none	none	0.1	0.1	n/a
Field/Pasture	0.5	0.5	0.5:1	0.3	none	none	0.3 offsite[3]
TOTAL	**249.0**	**113.0**	**--**	**19.2**	**42.2**	**49.3**	**19.2[4]**

[1] *Includes 0.8-acre of impacts due to offsite fire clearing*

[2] *Includes an additional 2.3 acres of CSS as well as 0.14 acres of CLOW impacts that will be mitigated at a 3-to-1 and 4-to-1 ratio due to unauthorized clearing.*

[3] *Mitigation shall take place offsite for this habitat-type unless "out of kind" mitigation is approved by the County and the Wildlife Agencies. It is strongly recommended that excess CSS be used as mitigation for impacts to the horse pasture.*

[4] *Includes RPO wetlands, buffers, and all habitats within the easement. The BOSE not only mitigates habitat and species impacts, but also preserves the functioning wildlife corridor through the property.*

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Habitat Impacts and Mitigation Analysis

Table 2-4-1